

REMARKS

This paper responds to the Final Office Action (*Office Action*) mailed on April 13, 2009. Although Applicants believe the pending claims define over the cited art, Applicants have nonetheless amended claims 1, 15, 16, 18, 20, 27, 30, 38, and 40 in order to advance prosecution. Claim 41 has been canceled and claims 2, 17, 28, 29, and 31-33 remain canceled. No claims are added. Consequently, claims 1, 3-16, 18-27, 30, and 34-40 are now pending in this application.

Rejection of the Claims under 35 U.S.C. §112

On page 3, paragraph 5 of the *Office Action*, the Examiner rejected claims 15-16 and 18 under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Examiner stated, “Claim 15 attempts to include more than one device. Such is improper as the recitations broaden the claimed subject matter of a singular device.” (*Office Action* at 3, paragraph 6.) In response, Applicants have amended claim 15 to be an independent claim and not depend from claim 1. Applicants believe that independent claim 15 is now in condition for allowance and respectfully request the Examiner to reconsider and remove the rejection under 35 U.S.C. §112 with reference to claim 15 and claims 16 and 18 that depend therefrom.

Rejection of the Claims under 35 U.S.C. §103(a)

On page 3, paragraph 9 of the *Office Action*, the Examiner rejected claims 1, 3-16, 18-27, and 30-41 under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,213,021 to *Pickett* in view of U.S. Patent No. 5,552,372 to Ackermann et al. (*Ackermann*). Since a *prima facie* case of obviousness has not been properly established, Applicants respectfully traverse the rejection.

The recent U.S. Supreme Court decision of *KSR v. Teleflex* provides a tripartite test to evaluate obviousness.

A rationale to support a conclusion that a claim would have been obvious is that ***all the claimed elements were known in the prior art*** and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art. (*See KSR*

International Co. v. Teleflex Inc., 127 S. Ct. 1727, 82 U.S.P.Q.2d 1385 (2007)). (Emphasis added.)

Applicants will show that the cited references, either singly or in combination, neither teach nor suggest all limitations of Applicants' claims.

In particular, Applicants' independent claim 1 recites, *inter alia*,

[A] control unit to control a magnetic output of the superconducting magnet; and

a heading sensor located in the magnetic signature minesweeping device, the heading sensor in communication with the control unit to monitor a magnetic heading of the device, the control unit further to control the magnetic output of the superconducting material magnet responsive to the magnetic heading, and to cause different magnetic outputs to be provided for different magnetic headings. (Emphasis added.)

Each of Applicants' other independent claims, namely claims 15, 20, 27, and 30, share similar limitations with claim 1.

On page 4 of the *Office Action*, the Examiner stated that *Pickett* discloses the heading sensor and the control unit.

[A] heading sensor, such as *would be normally found within helicopter 20*, Fig. 1, for example, in communication with the control unit. With respect to the control unit 'monitoring a magnetic heading,' 'arranged to control the magnetic output,' and 'cause different magnetic outputs,' so long as the prior art is capable of such, it anticipates the claim. (*Office Action* at 4, emphasis added.)

Contrary to the Examiner's assertion, *Pickett* is completely silent on a heading sensor, or any type of sensor, being built into the helicopter (or anywhere else). The Examiner cannot merely speculate on what may be contained in a reference and must instead rely on what is actually taught or suggested. In contrast to *Pickett*,¹ Applicants' independent claim 1, as amended, recites

¹ The Examiner relies exclusively on *Pickett* to teach all of Applicants' claimed elements except for superconducting material magnets. The Examiner relies on *Ackermann* only to teach the superconducting magnets. (See *Office Action* at 4.)

“a heading sensor **located in** the magnetic signature minesweeping device” and not on another device used to tow a device through the water as allegedly discussed by *Pickett*. Therefore, not only does *Pickett* completely fail to discuss teach or suggest a heading sensor, but *Pickett* totally fails to discuss a heading sensor located on the device.

USPTO personnel may not dissect a claimed invention into discrete elements and then evaluate the elements in isolation. Even if *Pickett* taught a heading sensor, which it does not, the claim as a whole must be considered. (See, e.g., *Diamond v. Diehr*, 450 U.S. 175, 188-89, 209 USPQ 1, 9 (1981).) Therefore, *Pickett* cannot and does not render Applicants’ claim 1 as obvious.

Moreover, in contrast to Applicants’ claimed element of a “control unit arranged to **control** a magnetic output of the superconducting magnet,” *Pickett* discusses control circuitry that merely *establishes* a simulated magnetic signature and **supplies current to the wing drive motor** to maintain a preselected depth.

[C]ontrol circuitry 42 is provided in association with the rectifier circuitry 40 as diagrammed in FIG. 2 to **establish the simulated magnetic signature of the magnetic field** during travel of the underwater vehicle 14 at the preselected underwater depth 16, maintained by regulatory **control of the electrical current supplied by the control circuitry 42** to the wing drive motor 34.” (*Pickett* at col. 2, lines 22-28.)

Pickett is completely silent on actually **controlling** a magnetic output but rather, *Pickett* merely **establishes a simulated signature**. Further, *Pickett* is completely silent on a control unit able to “control the magnetic output of the superconducting material magnet responsive to the magnetic heading, and cause different magnetic outputs to be provided for different magnetic headings” as recited by Applicants’ independent claim 1.

Asserting that the cited reference teaches the Applicants’ claimed elements is merely conclusory with no actual support found in Pickett. “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” (See *In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006), cited with approval in *KSR Int’l v. Teleflex Inc.*,

127 S. Ct. 1727, 1740-41 (2007)). Although the Examiner cites to portions of the cited reference, there is no rational argument providing a legal nexus between the cited portions and Applicants' claims.

Since Applicants have shown that not all the claimed elements were known as required by *KSR*, either by *Pickett* singly or in combination with *Ackermann*, Applicants respectfully request the Examiner to reconsider and withdraw the rejection under 35 U.S.C. §103 with regard to independent claims 1, 20, 27, and 30.² Additionally, as amended, claim 15 is also an independent claim sharing similar limitations with claim 1 and is allowable for at least the same reasons as claim 1.

Further, claims 3-14, 16, 18, 19, 21-26, and 34-40 all depend, either directly or indirectly, from claims 1, 15, 20, 27, or 30 which Applicants have shown to be patentable. Therefore, each of these dependent claims is allowable for at least the same reasons as the claim from which it depends. Further, each of these dependent claims may be patentable for its own limitations. Consequently, Applicants respectfully request that the rejections made under 35 U.S.C. §103(a) with respect to these dependent claims be reconsidered and withdrawn.

² On page 8 of the *Office Action*, the Examiner rejected claim 30 as "a method of operating the device." Applicants respectfully note that claim 30 is a system claim.

Reservation of Rights

In the interest of clarity and brevity, Applicants may not have equally addressed every assertion made in the Office Action, however, this does not constitute any admission or acquiescence. Applicants reserve all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicants do not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicants timely object to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicants reserve all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone the undersigned attorney at (408) 660-2015 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 15th day of June, 2009.

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Signature